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## **Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

- 1. (Presently Amended) An isolated or purified enzyme exhibiting nicotianamine synthase activity, wherein the enzyme is selected from:
- (A) the polypeptide having an amino acid sequence of SEQ ID NO: 1; or
- (B) a polypeptide corresponding to SEQ ID NO: 1 in which at least one amino acid has been replaced by another amino acid residue, at least one amino acid in the sequence of SEQ ID NO: 1 has been deleted, or at least one additional amino acid has been inserted into the sequence of SEQ ID NO: 1a polypeptide having more than 50% identity with an amino acid sequence of SEQ ID NO: 1 and comprising at least one consensus sequence of SEQ ID NO: 1 that is:
  - (1) 25LPXLSPSPXVDRLFTXLVXACVPXSPVDVTKL56;
  - (2) 67 LIRLCSXAEGXLEAHY82,;
  - (3) 92PLDHLGXFPY<sub>101</sub>.;
  - (4) 128 VAFXGSGPLPFSS 140,;
  - $(5)_{199}$ DVVFLAALVGM<sub>209</sub>; or
  - (6) 253RGGFXVLAVXHP264;

wherein X is a variable amino acid residue.

- 2. (Previously presented) The enzyme according to claim 1, wherein said enzyme is isolated from barley.
- 3. (Presently Amended) The enzyme according to claim 12, wherein the enzyme has an amino acid sequence shown in SEQ ID NO: 1, 3, 5, 7, 9, 11 or 13 comprises the consensus amino acid sequence of 199DVVFLAALVGM209.

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- 4. (Previously presented) The enzyme according to claim 1, wherein said enzyme is isolated from Arabidopsis.
- 5. (Canceled)
- 6. (Presently Amended) The enzyme according to claim 1, wherein said enzyme is <u>isolated</u> ebtained from Oryza sativa.
- 7. (Canceled)